Gentianella stellata

COMMON NAME
gentian

SYNONYMS
None (first described in 2004)

FAMILY
Gentianaceae

AUTHORITY
Gentianella stellata Glenny

FLORA CATEGORY
Vascular – Native

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

STRUCTURAL CLASS
Herbs - Dicotyledons other than Composites

CURRENT CONSERVATION STATUS
2012 | At Risk – Naturally Uncommon | Qualifiers: RR

PREVIOUS CONSERVATION STATUSES
2009 | At Risk – Naturally Uncommon
2004 | Range Restricted

DISTRIBUTION
Endemic. New Zealand: South Island (Nelson DUrville Island, Bryant Range, Dun Mountain, Mt Starveall, Red Hills (Richmond Range)

HABITAT
Montane Leptospermum scoparium and Lepidosperma australe shrubland and scrub on ultramafic soils

FEATURES
Plants monocarpic, biennial, height in flower 180-730 mm. Caudex unbranched or branched with branches short, c. 30 mm long. Root 1.8–6.0 mm diameter at stem base. Flowering stems terminal only or terminal and lateral, 1–6 per plant, largest flowering stem 1.7–5.4 mm diam. at base, stem colour green or tinted crimson, purple-black, or bronze, lateral flowering stems erect when present, flowering stem leaves 3–6 pairs per stem, lowest pedicels from near base of flowering stem or halfway up flowering stem or near apex of flowering stem. Rosette of leaves present and distinct from flowering stem leaves, leaves narrowly elliptic or elliptic, 12.0–100.0 × 3.7–19.0 mm wide, green or tinted crimson, purple-black, or bronze, flat or slightly to strongly channelled, recurved; leaf apex acute or rounded; petiole absent, leaf 2.9–5.7 mm wide at base. Flowering stem leaves similar to rosette leaves but smaller, ovate, strongly recurved and channelled. Pedicels 1 or 2 per leaf axil, 3–45 mm long (those from low on the flowering stem very long), 0.75–1.5 mm diameter. Flowers 11–59 per plant, 14–29 mm long. Calyx 6.0–13 mm long, green or crimson, hairs at calyx–corolla fusion line absent or present; lobes 3.8–8.2 mm long, 1.5–3.0 mm wide at base, recurved, apices acute, margins smooth or minutely denticulate, sinus hairs few. Corolla (10–)13–23 mm long, white, veins uncoloured; tube 3.0–6.3 mm long; lobes 11.5–19 mm long, 6.3–9.5 mm wide, hairs below sinus few or absent; nectary 1.7–2.7 mm from corolla base. Filaments 5.9–10.6 mm long from corolla base, 0.6–1.2 mm wide. Anthers 1.7–3.1 mm long, anther wall yellow or blue-black, mouth yellow, extrorse at anthesis. Stigma colourless or slightly tinted blue. Ovules 18–68 per ovary, ovary turning purple in maturity. Capsule 11.5–21 mm long.

SIMILAR TAXA
Distinguished by its restriction to ultramafic substrates, by the central flowering stem and unbranched caudex, and by the large white flowers with yellow anthers. The leaves are recurved and strongly channelled, thick in texture, as are the flowering stem leaves.

FLOWERING
March – August

FLOWER COLOURS
White, Yellow

FRUITING
April – September

LIFE CYCLE
Seeds dispersed by ballistic projection, wind and water (Thorsen et al., 2009)

PROPAGATION TECHNIQUE
Difficult. Should not be removed from the wild

THREATS
A naturally uncommon, range restricted endemic which is sparse to locally abundant within its montane ultramafic rock habitat.

ETYMOLOGY
gentianella: Little Gentiana (named after Gentius, 6th century king of Illyria, who found the roots of the yellow gentian to have a healing effect on his malaria-stricken troops)
stellata: With spreading star-like rays,starry

WHERE TO BUY
Not commercially available.

ATTRIBUTION
Fact Sheet for NZPCN prepared by P.J. de Lange (1 November 2004). Description modified from Glenny (2004)

REFERENCES AND FURTHER READING
Glenny, D. 2004: A revision of the genus Gentianella in New Zealand. New Zealand Journal of Botany 42: 361-530.
Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. Perspectives in Plant Ecology, Evolution and Systematics 11: 285-309

MORE INFORMATION
https://www.nzpcn.org.nz/flora/species/gentianella-stellata/